EMERGING MARKET ECONOMIES AND GOVERNMENT PROMOTION OF SECURITIZATION

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I. INTRODUCTION

Securitization in its broadest meaning refers to the process of transforming traditional forms of bilateral, illiquid financial relationship (e.g., loans) into freely tradable market instruments (i.e., securities). In this broad meaning, securitization has been a key trend in financial markets over the past thirty years, as finance has moved away from traditional bank lending to the capital markets.[1] More frequently, however, securitization is used to refer to a specific form of financial transaction in which assets (typically loans or other receivables of some sort, but possibly any future stream of revenue) are packaged together and used to collateralize or "back" an issuer or an issue of securities. This process may be effected under varying structures, but most commonly through the issue of bonds by a separate special purpose vehicle (SPV). This type of transaction is more appropriately referred to as asset securitization. In the developed financial markets of the United States and the United Kingdom, asset securitization serves a number of different purposes: (1) supporting public policy objectives such as broad home ownership and the development of financial markets (especially capital and mortgage markets);[2] (2) addressing regulatory requirements for financial institutions, especially capital adequacy and lending limit requirements

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1. *See generally* ROY C. SMITH & INGO WALTER, GLOBAL BANKING (1997) (describing international capital market structures, operations, and trends).

2. DAVID BARBOUR ET AL., ASSET SECURITIZATION IN EMERGING MARKET ECONOMIES: FUNDAMENTAL CONSIDERATIONS 8–11 (London Institute of Int'l Banking, Fin. & Dev. L., Essays in Int'l Fin. & Econ. L. No. 13, 1998).

applicable to banks;[3] (3) transferring risk, especially in the context of non-performing assets and portfolio diversification;[4] and (4) providing finance.[5] The usefulness of these sorts of financial structures in a variety of contexts has prompted countries and market participants from around the world to seek to develop similar structures in their own markets.[6] The most successful examples have been in continental Europe.[7] These efforts, however, need to be placed in the appropriate context: asset securitization is a sophisticated capital market-based financial structure that rests on a complex matrix of supporting elements, all of which have a significant legal element. The lesson: traditional asset securitization structures cannot simply be "parachuted" into individual financial systems (especially those of emerging market economies with a civil law tradition) and expected to fulfill the sorts of functions for which they are so useful in the United States and the United Kingdom. Nonetheless, undertaking an asset securitization transaction in any given jurisdiction serves as a useful "stress test" of the limits in that specific jurisdiction, especially in respect to legal impediments.

The requisite elements necessary for asset securitization transactions can be derived from analysis of the most common form of asset securitization, the securitization of mortgages.[8] At the most basic

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3. According to the Basel Committee on Banking Supervision, banks that securitize assets are able to accomplish several objectives: "1) reduce regulatory capital requirements; 2) obtain an additional source of funding, generally at lower cost; 3) enhance financial ratios; . . . 4) manage portfolio risk;" and 5) diversify their portfolios. BASEL COMM. ON BANKING SUPERVISION, CONSULTATIVE DOCUMENT: ASSET SECURITISATION 1 (2001), *available at* http://www.bis. org/publ/bcbsca06.pdf (last visited May 5, 2002) [hereinafter BASEL COMM. ON BANKING SUPERVISION: ASSET SECURITISATION].

4. BARBOUR ET AL., *supra* note 2, at 8–11.

5. *Id*; *see generally* Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133 (1994) (describing asset securitization and its benefits); Claire A. Hill, *Securitization: A Low-cost Sweetener for Lemons*, 74 WASH U. L.Q. 1061 (1996) (expanding on Schwarcz's analysis to examine the underlying basis of securitization benefits).

6. *See, e.g.*, Claire A. Hill, *Latin American Securitization: The Case of the Disappearing Political Risk*, 38 VA. J. INT'L L. 293, 328–29 (1998).

7. *See generally* Liz Jones, *European CMBS: All Talk and No Action*, 16 J.I.B.L. 149 (2001) (describing the strengths of Europe's commercial mortgage backed securitization (CMBS) market); Giles Thieffry & Jonathan Walsh, *Securitization: The New Opportunities Offered by Economic and Monetary Union*, 12 J. INT'L BANKING L. 463 (1997) (forecasting that the introduction of a common currency in Europe will have a favorable effect on European securities markets).

8. Mortgage securitization is chosen because of the key role real estate finance plays in economic development (addressed in Section II). For a discussion in the context of receivables financing, see Steven L. Schwarcz, *Towards a Centralized Perfection System for Cross-border Receivables Financing*, 20 U. PA. J. INT'L ECON. L. 455 (1999).

level, a mortgage securitization involves a variety of key supporting elements: (1) a market for real estate-based finance, such as mortgages; (2) capital markets (e.g., markets for securities); and (3) infrastructure to support securitization, such as the legal support for appropriate SPVs. All three elements are interrelated and encourage financial stability and economic development, but the fundamental premise remains that mortgage securitization (and by extension more complex forms of asset securitization) is not possible without all three elements.

II. THE FIRST KEY ELEMENT: A SYSTEM OF FINANCE BASED UPON REAL ESTATE

A. Real Estate Finance Generally

Clearly, the key underlying element necessary for securitization of mortgages is the existence of sufficient numbers of mortgages of predictable quality. This entails the existence of a functioning system of finance based upon real estate. Significantly, recent research supports the view that such a system of finance based upon real estate is in fact a key to financial and economic development.[9]

Specifically, in a 1999 World Bank study, Frank Byamugisha develops a theoretical and conceptual framework to guide the empirical analysis of the effects of real estate finance on the economy as a whole.[10] He argues that the conceptual framework linking real estate finance to financial development and economic growth has five key linkages: (1) the land tenure security and investment incentives link-

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9. *See generally* HERNANDO DE SOTO, THE MYSTERY OF CAPITAL: WHY CAPITALISM TRIUMPHS IN THE WEST AND FAILS EVERYWHERE ELSE (2000) (proposing that the reform of legal systems in developing countries can help activate idle capital); DOUGLASS C. NORTH & ROBERT P. THOMAS, THE RISE OF THE WESTERN WORLD: A NEW ECONOMIC HISTORY (1973) (arguing that efficient economic organization is the key to growth); NATHAN ROSENBERG & L. E. BIRDZELL, HOW THE WEST GREW RICH: THE ECONOMIC TRANSFORMATION OF THE INDUSTRIAL WORLD (1986) (arguing that Western economic development hinged on factors promoting experimentation); Arthur A. Goldsmith, *Democracy, Property Rights and Economic Growth*, 32 J. DEV. STUD. 157 (1995) (providing empirical evidence that the growth of democratic freedoms and property rights in poor countries may lead to increased local prosperity); Johan Torstensson, *Property Rights and Economic Growth—An empirical study*, 47 KYKLOS 231 (1994) (applying empirical analyses of property rights and economic growth to substantiate the earlier findings of Rosenberg and Birdzell as well as North and Thomas).

10. FRANK BYAMUGISHA, THE EFFECTS OF LAND REGISTRATION ON FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH: A THEORETICAL AND CONCEPTUAL FRAMEWORK 12 (World Bank Policy Research, Working Paper No. 2240, 1999).

age; (2) the land title, collateral, and credit linkage; (3) the land liquidity, deposit mobilization, and investment linkage; (4) the land markets, transactions, and efficiency linkage; and (5) the labor mobility and efficiency linkage.[11] All five linkages are necessary to support effective real estate-based finance, and all five are in fact based upon the existence of appropriate legal infrastructure.[12]

B. Developing Mortgage Markets

Given the significance of real estate finance for economic development, the next issue focuses on the development of markets in which secondary mortgage markets can have an important role. In a 1997 World Bank study, Dwight Jaffee and Bertrand Renaud analyze factors that hinder the development of mortgage markets in the transition economies of central and eastern Europe and propose a strategy to expedite development.[13] They show that banks in transition economies are reluctant to make mortgage loans because of the risks in mortgage lending (i.e., credit, interest rate, and liquidity risks) and suggest that, together with necessary improvements in the primary market, a secondary mortgage market is likely to assist in solving these problems. In this respect, they conclude:

> A housing finance system, however, is unlikely to spring up without government support, whatever one's faith in the dexterity of Adam Smith's *invisible hand*. Government support was required in the developed economies, and it is required now in the transition economies. In fact, the transition economies face the additional major hurdle that they must first create an economic and legal infrastructure that can support the long-term and complex market relationships and contracts that constitute a housing financial system.[14]

According to Jaffee and Renaud, the transition process focuses on three key processes: (1) economic stabilization and liberalization; (2) privatization; and (3) financial sector development.[15] Specifically, they conclude: "Mortgage market development is likely to be a key

11. *Id.* at 6–10.

12. Byamugisha graphically presents the connections between the five factors and their role in creating a conceptual framework of land registration, financial development, and economic growth. *Id.* at 7 fig.2.

13. DWIGHT JAFFEE & BERTRAND RENAUD, STRATEGIES TO DEVELOP MORTGAGE MARKETS IN TRANSITION ECONOMIES 4 (World Bank Policy Research, Working Paper No. 1697, 1996).

14. *Id.* at 27.

15. *Id.* at 1.

factor in overall financial market development."[16] In another recent World Bank study, Ahmed Galal and Omar Razzaz argue that land and real estate reforms, to be successful, must be "comprehensive in design, even if implementation is phased in over time."[17] They contend that such reforms must include three elements:[18] (1) institutional reforms that better define property rights,[19] reduce information asymmetry, and improve contract performance (Property Rights, Information, Contracting and Enforcement (RICE));[20] (2) capital market reforms that make mortgage finance available at reasonable rates, especially for the poor (Finance and Risk Management);[21] and (3) market reforms that reduce or eliminate the main distortions in the prices of goods and services produced by land and real estate assets (Market Regulation and Fiscal Policy).[22] Their conclusions clearly link mortgage market development to broader efforts to develop real estate finance to serve as a driving factor in financial and economic development.

III. THE SECOND KEY ELEMENT: DEVELOPMENT OF CAPITAL MARKETS

A. Secondary Market in Mortgages

In respect to mortgage market development, Jaffee and Renaud suggest that secondary mortgage markets confer two main benefits:

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16. *Id.* at 3 (noting that mortgage debt is the largest component of the U.S. domestic debt market). Jaffee and Renaud further portray the relevance of mortgage market development in the broader context of financial market development and graphically present a framework for sustainable financial development showing that the creation of a housing finance system is an integral part of the overall development of the financial sector. *Id.* at 28 fig.4.

17. AHMED GALAL & OMAR RAZZAZ, REFORMING LAND AND REAL ESTATE MARKETS 31 (World Bank Policy Research, Working Paper No. 2616, 2001).

18. *Id.* at 31, 10–18 & tbl.2.

19. Property rights regimes include: constitutional protection of property; laws and regulations defining rights and obligations to property; means of assignment of rights to property; and institutional arrangements that register and enforce such rights. *Id.* at 17.

20. Issues include well-defined property rights, protected through formal, informal or traditional institutions; permissibility of evolution and transformation of property rights; exercisability and related transactions costs; and ability of the poor to access real estate and related finance. *Id.* at 38.

21. Issues include a conducive macro environment; competitive mortgage finance markets; adequate banking regulation and supervision; developed capital markets, including secondary mortgage markets and institutional investors; and well-developed and reliable foreclosure and repossession laws and procedures and appropriately designed subsidy systems. *Id.*

22. Issues include appropriate land use regulations and appropriate incentive systems for real estate, finance, services, and investment. *Id.* at 38–39.

(1) the ability of banks to shed risks associated with holding mortgages; and (2) the creation of standards for credit evaluation and collateral procedures that directly increase the efficiency of the primary markets for new mortgage originations.[23] In order to secure these benefits, the authors suggest an important and often catalytic role for governments in developing secondary mortgage market (SMM) systems and institutions. This role is based on similar experiences in developed countries, including the United States.[24] To establish a system (in the form of a mortgage credit institution (MCI) which issues debt in the capital markets and uses its funds to purchase mortgages from the originator-institutions), Jaffe and Renaud suggest five key principles: (1) the primary role of the government in the secondary mortgage market should be to guarantee the bonds issued by the MCI, with costs defrayed through a user fee (government guarantee of MCI debt); (2) access to the SMM should be available to all lenders and borrowers who are able to offer properly underwritten mortgage instruments for sale (a level playing field for all lenders and borrowers); (3) the government should not manage the MCI but should maintain an appropriate supervisory role through regulations concerning assets, liabilities, and capital (government regulation, but not government management); (4) a plan should be established for privatization and entry of MCIs (competition, privatization, and sunset provisions); and (5) the government must create the legal and financial infrastructure, including property rights, foreclosure procedures, and secured lending laws, that are the necessary first step for the development of any meaningful mortgage market activity (public policy in support of primary lenders).[25]

23. JAFFEE & RENAUD, *supra* note 13, at 5.

24. The authors evaluate three structures: (1) purchases by mortgage credit institutions, such as the Federal National Mortgage Association (FNMA) in the United States; (2) loans to depository institutions by mortgage credit institutions, such as the Federal Home Loan Banks (FHLBs) in the United States; and (3) mortgage securitization, through purchase and sale through a mortgage credit institution (MCI), such as FNMA in the United States. They conclude that mortgage securitization is unlikely to be relevant in the context of the transition economies. *Id.* at 17–22. This author, however, would suggest that it is only a small step from the first or second structure to the third and that the benefits in terms of capital market development make securitization structures and issues very relevant in the wider context of the role that securitization can play in financial development and stability.

25. *Id.* at 24–27.

B. Functioning Domestic Bond Markets

With the stage set by the existence of a domestic mortgage market, mortgage securitization can play an important role in promoting the development of a second type of capital market, the domestic bond market. Following financial crises around the world over the past decade, international attention has increasingly focused on developing local bond markets. In a study published in 2000, the International Finance Corporation (IFC) of the World Bank analyzes bond market development in Asia and provides some lessons to guide future development efforts.[26] At the most general level, the study finds that a number of interactive factors make up the environment necessary for bond market development and need to be considered from the bottom up. These factors include factors around the market, factors across other parts of the financial system, and factors inside the market.[27]

In this context, the study suggests that whether a primary market can be built depends upon the existence of four key factors: (1) market participants (inside); (2) government commitment (inside); (3) macroeconomic stability and credibility (around); and (4) taxation (around).[28] If these are in place, four second-layer success factors in turn become significant (all across):[29] (1) government securities markets; (2) equity and money markets; (3) the banking system; and (4) credit-rating agencies. Secondary markets are even more difficult, and in some cases impossible, to develop.[30] Regardless, markets must be developed in stages, the sequencing and content of which necessarily depend upon the specific domestic context.[31]

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26. BUILDING LOCAL BOND MARKETS: AN ASIAN PERSPECTIVE (Alison Harwood ed., 2000). The study looked at five South Asian countries: India, Pakistan, Sri Lanka, Bangladesh, and Nepal.

27. Alison Harwood, *Building Local Bond Markets: Some Issues and Actions*, *in* BUILDING LOCAL BOND MARKETS, *supra* note 26, at 1, 6–7, 8 fig.1 (fig.1 depicts the Bond Market Environment, showing the relationship between various factors inside, around, and across the market to the Capital Market Infrastructure).

28. *Id.* at 10–13.

29. *Id.* at 13–15.

30. *Id.* at 15–16. Nonetheless, even without an effective secondary market, the development of debt capital markets supports diversification of finance and financial stability.

31. *Id*. at 25–26.

IV. THE THIRD KEY ELEMENT: INFRASTRUCTURE SUPPORTING SECURITIZATION

A 1999 Asian Development Bank (ADB) report surveying securitization in eight Asian countries[32] found the following overall characteristics: (1) shallow domestic bond markets with the greatest liquidity concentrated in short-term securities; (2) weak legal frameworks in support of securitization; and (3) large and growing primary mortgage markets despite the Asian financial crisis.[33] On the basis of this prevailing state, the report makes thirteen recommendations to encourage the development of mortgage-backed securities markets in the Asian region:

(1) foster macroeconomic stability;[34]

(2) develop legal infrastructure to support primary and secondary mortgage markets;[35]

(3) establish secondary mortgage corporations;[36]

(4) use special-purpose trusts (SPTs) in economies with a dominant mortgage lender (typically state-owned);[37]

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32. The surveyed countries include the People's Republic of China, India, Indonesia, South Korea, Malaysia, Pakistan, the Philippines, and Thailand.

33. MORTGAGE-BACKED SECURITIES MARKETS IN ASIA 54 (Renato Reside et al. eds., 1999).

34. "Macroeconomic stability encourages long-term investment and thus provides the basis for building long-term capital markets, including MBSs [mortgage-backed securities] markets. Therefore, economies should make every effort to stabilize their macro economies in the light of the Asian financial crisis." *Id.*

35. With respect to the domestic mortgage markets, economies must have a legal and regulatory framework conducive to building liquidity in the primary and secondary markets for mortgages and for MBSs. Foreclosure laws must be restructured to facilitate the recovery of properties, clear tax and accounting rules must govern the conveyance/assignment and true sale of mortgages, and transaction costs must be minimized.

Id. at 55.

36. Experience indicates that a secondary mortgage corporation (SMC), though not a necessary condition for the introduction of MBSs, facilitates its development if there are many competitors in the primary mortgage markets. Therefore, while current MBSs markets may not justify the development of an SMC, the future growth of MBS markets may entail the establishment of one.

Id. at 56.

37. In economies where the dominant primary mortgage lender is (still) expected to be a single institution, securitization should (in theory) be easier to develop. This is because a single institution will have all of the relevant information for securitization (loans, borrower histories, portfolio quality, etc.). In this case, it may be advisable to explore securitization through a special-purpose trust (SPT) arrangement with a bank rather than through SMCs.

Id. at 57.

(5) improve and standardize the mortgage underwriting process;[38]
(6) create competitive domestic bond markets with appropriate taxation;[39]
(7) establish a benchmark yield curve;[40]
(8) eliminate investment restraints;[41]
(9) develop appropriate technology for trading, clearing and settlement;[42]
(10) improve disclosure and develop ratings systems;[43]
(11) create legal infrastructure to support credit enhancement;[44]
(12) reduce or eliminate interest-rate controls and subsidies;[45] and
(13) enhance regulatory capacity.[46]

Significantly, most of these elements relate directly to legal infrastructure, but more importantly, many also require (or at least may be encouraged through) government promotion.

> 38. Economies should also strive to improve overall mortgage underwriting procedures, including the quality of borrower and credit history information, to improve borrower screening and ultimately the overall quality of mortgages. Then, they should introduce practices such as credit scoring to help standardize the underwriting process and facilitate the development of the MBSs market.

Id.

39. "With respect to domestic bond markets, economies must ensure that transaction costs and taxes do not constrain liquidity in the primary and secondary financial markets. Regulators must also ensure that domestic bond markets are competitive, to minimize spreads and distribute market power among participants." *Id.* at 58.

40. "Because they allow longer-term debt to be priced, the establishment of long-term benchmark yield curves also encourages bond/MBSs market development." *Id*.

41. "Constraints on eligible instruments by potential investors, such as contractual savings institutions, inhibit the development of domestic bond markets." *Id.* at 59.

> 42. To reduce transaction risk in MBSs the private sector and the government may consider investing in technology to improve overall clearing and settlement. Establishing formal and organized over-the-counter markets for bonds and MBSs, or allowing MBSs to be issued and traded in the local stock exchange, will encourage the adoption of modern technology in MBSs markets, and will also improve market liquidity.

Id.

43. "Improved access to information about bond market participants fosters competition and efficiency in financial markets, including MBSs markets. The cultivation of a ratings culture may therefore stimulate bond/MBSs market growth." *Id.* at 60.

44. "Aside from providing improved legal protection for creditors, countries may also consider building a sufficient framework for the provision of external credit enhancements for MBSs, such as facilitating the development of competitive private mortgage guarantee markets." *Id.* at 61.

45. "Price distortions in mortgage and bond markets, such as interest-rate controls and subsidies, inhibit bond/MBSs market development. They should be used only minimally or, better yet, eliminated." *Id*.

46. "Regulators must strengthen their technical capacity to supervise and regulate MBS transactions." *Id*. at 62.

V. CONCLUSION: IMPLICATIONS FOR GOVERNMENT PROMOTION OF MORTGAGE SECURITIZATION

In a short space, this article has attempted to make a number of points:

1. The promotion of asset-backed securitization, especially mortgage-backed securitization, can have a significant impact on financial development and stability, in turn supporting economic development.
2. Mortgage securitization is one aspect of an overall process of financial market development and cannot be separated from the larger process.
3. Mortgage securitization rests on a complex matrix of legal and institutional structures and must be addressed in this context.

Based upon the analysis above, a number of steps may be identified to guide any government seeking to promote the development of mortgage securitization.[47] At the most basic level, the creation of a functioning system of real estate-based finance involves a number of issues beyond the precondition of macroeconomic stability: (1) clear property rights to real estate; (2) clear rights to transfer property rights (including bankruptcy and foreclosure); (3) clear rules respecting use of real estate as collateral; (4) financial institutions capable of undertaking credit analysis related to collateralized real estate lending; (5) a clear and predictable system of taxation; and (6) appropriate financial regulation and supervision. Regardless of whether more complex issues are addressed, putting in place such a framework most likely will enhance financial stability and economic development.

Unfortunately, with respect to most of the issues,[48] international agreement on appropriate standards does not exist. Philosophical dif-

47. For a discussion of government efforts to promote the development of debt capital markets in Hong Kong through securitization, see Stefan Gannon, *The Use of Securitization to Mobilize Liquidity and in Particular the Use of Specialized Mortgage Corporations*, *in* INTERNATIONAL BANK INSOLVENCIES: A CENTRAL BANK PERSPECTIVE 301, 301–10 (Mario Giovanoli & Gregor Heinrich eds., 1999). The Hong Kong government has also promoted the development of mortgage securitization. Further information is available on the Hong Kong Monetary Authority website, http://www.info.gov.hk/hkma (last visited Jan. 31, 2002), and on the Hong Kong Mortgage Corporation website, http://www.hkmc.com.hk (last visited Jan. 31, 2002).

48. The exceptions are the factors of credit analysis and financial regulation and supervision. International efforts have dealt with both of these issues extensively, encouraging financial stability through a complex matrix of principles, standards, and guidelines now coordinated

ferences between legal systems and political and cultural variances have prevented international consensus in the context of property rights, despite their importance in economic development in a market-based system. Further, these barriers have discouraged international development institutions such as the World Bank, ADB, and the European Bank for Reconstruction and Development (EBRD) from pursuing reform programs in these areas.[49] This issue clearly merits more attention and research.

With the development of an appropriate legal and institutional framework supporting real estate finance, the next level of objectives focus on the development of domestic bond markets. Key issues in this respect include the establishment of a benchmark yield curve through the issuance of government securities and the creation of the infrastructure necessary for a market in government securities.[50] Once a market for government securities has been established, the framework can be extended to mortgage-backed securities and corporate debt.

According to the Committee on the Global Financial System (CGFS) of the G10 central banks, following financial crises over the past decade, "there seems to be a growing consensus that deep and liquid financial markets, especially government securities markets, are needed to ensure a robust and efficient financial system as a whole."[51] The CGFS has formulated five guiding principles which in turn are used to draw more specific policy recommendations: (1)

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through the Financial Stability Forum. Additional information regarding this arrangement is available on the Financial Stability Forum website, http://www.fsforum.org (last visited Jan 31, 2002).

49. Perhaps because of these difficulties, these institutions have placed more focus on collateral as opposed to moveables. *See generally* John Simpson & Joachim Menze, *Ten years of secured transactions*, LAW IN TRANSITION (European Bank for Reconstruction and Development (EBRD), London, U.K.), Autumn 2000, at 20–26 (summarizing accomplishments of the EBRD in secured transactions reforms for developing nations in Central and Eastern Europe); Nuria de la Pena et al., *Secured Transactions Law Reform in Asia: Unleashing the Potential of Collateral*, *in* 2 LAW AND POLICY REFORM AT THE ASIAN DEVELOPMENT BANK 2000, at 1 (2000) (a major study on secured transactions law reform based on findings of the Asian Development Bank's regional assistance studying the People's Republic of China, India, Pakistan, Thailand, and Indonesia); EMERGING FINANCIAL MARKETS AND SECURED TRANSACTIONS (Joseph J. Norton & Mads Andenas eds., 1999) (addressing the legal infrastructure area for economic law reform and exploring sundry comparative dimensions for "bridging the gap" between civil law and common law secured transactions).

50. *See supra* notes 27, 34–46 and accompanying text.

51. BANK FOR INT'L SETTLEMENTS, COMM. ON THE GLOBAL FINANCIAL SYSTEM, HOW SHOULD WE DESIGN DEEP AND LIQUID MARKETS? THE CASE OF GOVERNMENT SECURITIES 1 (1999).

competitive market structure should be maintained; (2) markets should have low levels of fragmentation; (3) transaction costs should be minimized; (4) sound, robust, and safe market infrastructure should be ensured; and (5) heterogeneity of market participants should be encouraged.[52] Based on these guiding principles, the CGFS has established five recommendations for the creation of deep and liquid government securities markets: (1) desirability of coherent debt management strategies: an appropriate distribution of maturities and issue frequency should be ensured as a means of establishing benchmark issues at key maturities; (2) taxation: the liquidity-impairing effect of taxes should be minimized; (3) transparency: transparency of sovereign issuers and issue schedules should be ensured and transparency of trading information encouraged, with due attention being paid to the anonymity of market participants; (4) trading rules and infrastructure: safety and standardization in trading and settlement practices should be ensured; and (5) related markets: repo, futures, and options markets should be developed.[53] Further, according to the CGFS, central banks have a clear role in market development and financial stability.[54]

With the establishment of a benchmark yield curve, mortgage securitization is the next focus in the process of capital market development. Issues which need to be addressed include: (1) modification of land and collateral laws to support the transfer of mortgages; (2) development of laws supporting use of intangibles as collateral; (3) establishment of a government-supported mortgage institution (focusing on both insurance and purchase); (4) modification of corporation and/or trust laws to support the creation of SPVs; and (5) establishment of credit rating agencies or credit agencies.

In this context, capital adequacy rules and lending limits have had a significant impact upon the development of securitization internationally. Recent proposals for a new Basel Committee on Banking Supervision Capital Accord (Basel II) provide some guidance for countries seeking to put in place the requisite elements to support securitization.[55] Specifically, countries seeking to establish

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52. *Id.* at 2–4.

53. *Id.* at 4–8.

54. *Id.* at 8.

55. *See* BASEL COMM. ON BANKING SUPERVISION, CONSULTATIVE DOCUMENT: THE NEW BASEL CAPITAL ACCORD (2001), *available at* http://www.bis.org/publ/bcbsca03.pdf (last visited Feb. 21, 2002) [hereinafter BASEL COMM. ON BANKING SUPERVISION: THE NEW BASEL CAPITAL ACCORD].

appropriate legal infrastructure to support securitization (perhaps through a law on securitization and/or modifications to bankruptcy and collateral laws) can look to the specific requirements necessary for capital adequacy purposes in order to guide legal reforms.[56] As one example, under the standardized approach for originators, the fundamental goal for capital purposes is to ensure a distinction between the bank originating assets and the securitization transaction itself, or a "clean break" as it is termed in Basel II.[57]

In order to achieve a clean break for capital purposes, under the minimum operational requirements, the bank must transfer the assets legally or economically via a true sale (e.g., novation, assignment, declaration of trust, or subparticipation). A true sale is characterized by the following elements: (1) the transfer of assets legally isolated from the transferor (supported by a legal opinion); (2) a transferee that is a Qualifying SPV and in which the holders of the beneficial interest in that entity have the right to pledge or exchange those interests; and (3) a transferor that does not maintain effective or indirect control over the transferred assets.[58] If these requirements are not met, then the securitization does not achieve capital relief, even if it would otherwise be a "true sale" under home country law.[59] Clearly, government efforts must focus on the necessary legal infrastructure to fulfill the minimum internationally acceptable operational requirements with respect to securitization and capital relief for banks. In addition, certain requirements apply to credit enhancements; for example, such enhancement must only be provided at the outset of the scheme and the full amount provided must be deducted from capital; otherwise, a clean break will not be achieved.[60]

The Basel II proposals also provide some guidance in the context of financial institutions investing in securitizations.[61] These requirements in turn influence the behavior of banks considering investing in

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56. *Id.* at 6. Basel II identifies three fundamental elements composing the minimum capital requirements: a definition of regulatory capital, risk-weighted assets, and the minimum ratio of capital to risk-weighted assets.

57. BASEL COMM. ON BANKING SUPERVISION: ASSET SECURITISATION, *supra* note 3, at 3.

58. *Id.*; BASEL COMM. ON BANKING SUPERVISION: THE NEW BASEL CAPITAL ACCORD, *supra* note 55, at 87.

59. BASEL COMM. ON BANKING SUPERVISION: ASSET SECURITISATION, *supra* note 3, at 3.

60. *Id.* at 3–4. Additional special requirements may apply in certain contexts, but these are outside the scope of the present analysis.

61. *Id.* at 6–7; BASEL COMM. ON BANKING SUPERVISION, CONSULTATIVE DOCUMENT: THE STANDARDISED APPROACH TO CREDIT RISK 8 (2001), *available at* http://www.bis.org/publ/bcbsca04.pdf (last visited Mar. 21, 2002) [hereinafter BASEL COMM. ON BANKING SUPERVISION: THE STANDARDISED APPROACH TO CREDIT RISK].

securitizations. For example, under the standardized approach for investors, the basic system rests on a rating-based risk weighting varying between 20% for AAA to AA- and 150% for BB+ to BB-.[62] Unrated credits would be assigned a 100% weighting. Significantly, lending fully secured by mortgages on residential property, whether rented or occupied by the owner, continues to be risk weighted at 50%.[63] The current proposal suggests that mortgages on commercial real estate should receive a 100% risk-weighting, subject to certain specific exceptions or conditions.[64] If Basel II proceeds to domestic implementation, the structure is likely to provide incentives for banks to securitize both residential mortgages and commercial property mortgages in order to reduce associated capital charges. As a result of the current risk-weighting structure of the Basel II proposals, governments around the world are likely to focus increasingly on developing appropriate legal infrastructure to support mortgage securitization. Further, the reliance on ratings of the Basel II proposals should encourage the development of ratings agencies and services, especially in emerging markets, with the requirements of rating agencies acting as a further incentive to government reforms. Nonetheless, the experience in the United States, United Kingdom, and continental Europe suggests that even with the existence of the necessary supporting elements, market development requires a significant amount of time, perhaps in the neighborhood of ten years.[65]

In the final analysis, however, appropriate legal design is not sufficient. While legal and institutional structures are key for financial development and stability, neither appropriate laws on the books nor effective institutions are sufficient in themselves for development.[66]

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62. BASEL COMM. ON BANKING SUPERVISION: ASSET SECURITISATION, *supra* note 3, at 6–7.

63. BASEL COMM. ON BANKING SUPERVISION: THE STANDARDISED APPROACH TO CREDIT RISK, *supra* note 61, at 8.

64. *Id.* at 9.

65. According to this analysis, the use of securitization in Hong Kong should increase dramatically. Recent increases in the number and sophistication of transactions suggests that this may be happening. *Cf.* Securitization in Asia: Developments and Outlook, Workshop organized by the Asian Institute of International Financial Law, Hong Kong University, and the Global Capital Markets Center, Duke University, held in Hong Kong, (Mar. 13, 2002) (on file with the Duke Journal of Comparative and International Law).

66. Pistor, Raiser, and Gelfer sum up the situation well: "In their analysis of law and finance around the world, [La Porta, Lopez-de-Silanes, Shleifer and Vishny] show that effective law enforcement is not a substitute for poor laws on the books. The experience of transition economies suggests that the reverse is also true: Good laws cannot substitute for weak institutions." KATHARINA PISTOR ET AL., LAW AND FINANCE IN TRANSITION ECONOMIES 25 (Euro-

Rather, both appropriate laws and effective institutions are necessary to support mortgage securitization in the context of broader financial development and stability.

pean Bank for Reconstruction and Development, Working Paper No. 48, 2000) (citing Rafael La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113, 1113–55 (1998)).